

What is claimed is:

- 1           1. A method for processing a circuit board, the circuit board including an area  
2       array bonding site, the method comprising:  
3                overlaying a protective cover over the bonding site by registering a  
4       plurality of posts secured to one of the protective cover and the circuit board  
5       into a plurality of apertures disposed in the other of the protective cover and  
6       the circuit board;  
7                performing a fabrication process on the circuit board while the  
8       protective cover is overlaid on the circuit board; and  
9                removing the protective cover.
- 1           2. The method of claim 1, wherein overlaying the protective cover over the  
2       bonding sites comprises an adhesiveless contact between the protective cover and the  
3       bonding site.
- 1           3. The method of claim 1, wherein the fabrication process comprises:  
2                overlaying a stencil on the circuit board, the stencil including a  
3       protective cover pocket registered to the protective cover on the circuit board;  
4                screen printing the circuit board; and  
5                removing the stencil.
- 1           4. The method of claim 1, wherein performing the fabrication process  
2       includes:  
3                placing the circuit board into a wave soldering fixture; and  
4                performing wave soldering on the circuit board.
- 1           5. The method of claim 1, wherein performing the fabrication process is  
2       preceded by placing the circuit board in a frame, the frame operable to support an  
3       opposite face of the circuit board.

1           6. The method of claim 1, wherein performing the fabrication process  
2 includes:  
3                 placing a surface mount technology (SMT) component on the circuit  
4 board; and  
5                 performing infra-red (IR) solder reflow on the circuit board.

1           7. The method of claim 1, wherein performing the fabrication process  
2 includes reworking the circuit board.

1           8. The method of claim 1, wherein removing the protective cover includes  
2 tipping the circuit board.

1           9. The method of claim 1, wherein the circuit board includes the plurality of  
2 apertures, the apertures passing through the circuit board, and the protective cover  
3 includes the plurality of posts, wherein removing the protective cover includes  
4 pushing one of the plurality posts through the corresponding one of the plurality of  
5 apertures.

1           10. The method of claim 1, wherein the area array bonding site comprises a  
2 plurality of land grid array terminal pads.

1           12.     The assembly of claim 11, wherein the protective cover includes an  
2     adhesiveless surface contacting the bonding site.

1           13. A method of fabricating a protective cover for processing a circuit board,  
2 the circuit board including an area array bonding site on a surface of the circuit board,  
3 the circuit board further including a plurality of apertures forming a footprint on the  
4 surface of the circuit board, the method comprising:

5                 sizing base material into a cover shape corresponding to the footprint  
6 of the plurality of apertures and the area array bonding site on the surface of  
7 the circuit board; and

8                 bonding a plurality of posts onto the base material in a pattern  
9 corresponding to the footprint of the plurality of apertures in the circuit board.

1           14. The method of claim 13, further comprising removably sizing each of the  
2 plurality of posts to a corresponding one of the plurality of apertures.

1           15. The method of claim 13, wherein the base material comprises epoxy glass.

1           16. The method of claim 13, wherein bonding the plurality of posts onto the  
2 base material further comprises:

3                 placing the base material into a first fixture, the first fixture including a  
4 plurality of lateral location guides to position the base material at a  
5 predetermined location;

6                 placing a second fixture into contact with the base material, the  
7 plurality of lateral location guides of the first fixture positioning the second  
8 fixture into the predetermined location, the second fixture including a plurality  
9 of guide holes registered to the plurality of apertures;

10                applying a bonding agent for bonding each of the plurality of posts to  
11 the base material; and

12                inserting each of the plurality of positioning posts through the  
13 corresponding one of the plurality of guide holes into bonding contact with the  
14 base material.

1           17. The method of claim 16, wherein applying the bonding agent for bonding  
2 each of the plurality of posts to the base material further comprises:

3                   injecting the bonding agent onto base material through each of the  
4 plurality of guide holes; wherein each guide hole includes a countersunk  
5 expansion for allowing a bead of bonding agent to form when one of the  
6 plurality of posts is inserted.

1           18. The method of claim 13, further comprising placing the first fixture in an  
2 oven for curing the bonding agent, the first fixture supporting the base material,  
3 second fixture, bonding material and plurality of posts.

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1           20.     The cover of claim 19, wherein the first face of the base member  
2     further includes a recess corresponding to said area array bonding site.

1           22.     The cover of claim 19, wherein each of the plurality of posts includes a  
2     diametral slot.